

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN

DOUGLAS DYNAMICS, LLC,

Plaintiff,

v.

BUYERS PRODUCTS COMPANY,

Defendant.

OPINION & ORDER

09-cv-261-wmc

In what remains of this action for patent infringement on remand from the Federal Circuit, plaintiff Douglas Dynamics, LLC alleges that defendant Buyers Products Company (“Buyers”) has infringed its patent, U.S. Patent No. Re. 35,700, for a “removable snowplow assembly with pivotable lift stand.” This court previously found non-infringement of claim 45, and perforce all the asserted claims depending from it (dkt. #332); on appeal, the Federal Circuit reversed (dkt. #568-1). *See Douglas Dynamics, LLC v. Buyers Prods. Co.*, 717 F.3d 1336 (Fed. Cir. 2013). Accordingly, the court now takes up previously undecided cross-motions for summary judgment as to (1) claim 45’s validity, and (2) the infringement and validity of dependent claims 47, 48, 49 and 51. (Dkt. #589.) For the reasons stated below, the court will grant Douglas’s motions for summary judgment, and deny Buyers’.

BACKGROUND

Defendant Buyers manufactures and sells SnowDogg snowplow assemblies in six different series, all of which use the same mounting mechanism and lighting harness as accurately set forth in Buyers’ own U.S. Patent No. 7,562,718. Plaintiff Douglas is also in

the business of manufacturing and selling snowplows and is the assignee of the single patent remaining in this suit.

Originally, Douglas brought claims for infringement against Buyers on five different patents. The parties filed cross-motions for summary judgment both on infringement and on invalidity. (See dkt. ##120, 158, 166, 170.) Based on those submissions, this court held that claim 45 of the '700 patent, as well as asserted dependent claims 47, 48, 49 and 51, were not infringed. (See Oct. 1, 2010 Opinion & Order (dkt. #332) 47.) Specifically, the court noted that claim 45 requires that the "A-frame and the support frame are connected to the mounting frame." ('700 patent, 18:51-52.)¹ The court found that this limitation required both the A-frame and support frame to be *directly* connected to the mounting frame, whereas Buyers' products featured an indirect connection between the A-frame and the mounting frame. (Oct. 1, 2010 Opinion & Order (dkt. #332) 46.) Accordingly, the court entered summary judgment of non-infringement on claim 45 and the dependent claims, and dismissed Buyers' counterclaims of invalidity without prejudice with respect to those claims. (See Oct. 6, 2010 Opinion & Order (dkt. #445) 16.)

On appeal, the Federal Circuit reversed this court's grant of summary judgment of non-infringement. It held that the element "connected to" encompassed both direct and indirect connections. See *Douglas Dynamics*, 717 F.3d at 1343. Because Buyers presented no other non-infringement arguments with respect to claim 45, the Federal Circuit "[found] the accused products meet every limitation of claim 45 as properly construed." *Id.* Therefore, it

¹ For ease of citation, and in keeping with general practice, the number preceding the colon will denote the patent's column number, while the number following the colon refers to the line number or numbers cited.

reversed, directing this court “to enter summary judgment of infringement in favor of Douglas.” *Id.*

With infringement of claim 45 entirely resolved by the Federal Circuit’s mandate, the court now takes up the question of that claim’s validity, which it previously declined to resolve. In addition, because the only basis for the previous finding of non-infringement of the dependent claims was the non-infringement of the underlying *independent* claim, the court must now consider infringement and validity with respect to claims 47, 48, 49 and 51.

Claim 45 of the ‘700 patent reads:

A vehicle mounted snowplow blade assembly comprising

- a vehicle having a frame member and a bumper,
- a mounting frame fixed to the frame member and located generally behind the bumper,
- a snowplow blade assembly including an A-frame and a snowplow blade fixed to the A-frame,
- a support frame connected to the A-frame, and

wherein the A-frame and the support frame are connected to the mounting frame for pivotable movement of the A-frame about a generally horizontally extending pivot axis and for affording removal of the A-frame and the support frame from the mounting frame as a unit so as to leave the mounting frame on the vehicle and behind the bumper.

(‘700 patent, 18:42-56.)

Claim 47 depends from claim 45 and reads:

A vehicle mounted snowplow blade assembly as set forth in claim 45

wherein said support frame, when connected to said mounting frame, includes an extension in front of and above said bumper, and

including an actuator connected to said support frame and said A-frame to pivot said A-frame about said pivot axis.

(‘700 patent, 19:13-20.)

Claim 48 also depends from claim 45 and reads:

A vehicle mounted snowplow blade assembly as set forth in claim 45 including a headlamp connected to said support frame and removable with said A-frame and said support frame.

(‘700 patent, 19:21-24.)

Claim 49 reads:

A vehicle mounted snowplow blade assembly as set forth in claim 45 including a support stand connected to said snowplow blade assembly and extending therefrom for ground engagement to support said snowplow blade assembly when detached from said vehicle, said support stand connected to said snowplow blade assembly for movement to store said support stand when said snowplow blade assembly is attached to said vehicle.

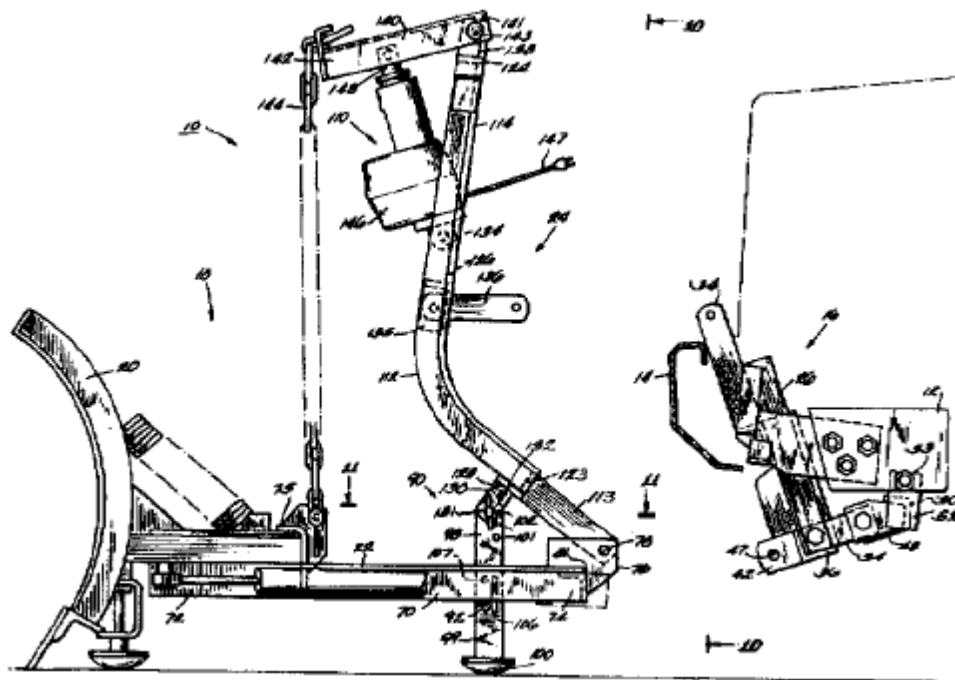
(‘700 patent, 19:25-32.)

Finally, claim 51 reads:

A vehicle mounted snowplow blade assembly as set forth in claim 45 wherein the snowplow blade assembly includes a support stand for supporting the A-frame in a generally horizontal position and, when the A-frame is not connected to the mounting frame, for selectively adjusting the vertical position of the snowplow blade assembly.

(‘700 patent, 19:41-20:4.)

Figure 1 of the ‘700 patent, directed toward a “removable snowplow assembly with pivotable lift stand,” is pictured below:



OPINION

Under 35 U.S.C. § 282, issued patents are presumed valid. “[A] moving party seeking to invalidate a patent at summary judgment must submit such clear and convincing evidence of facts underlying invalidity that no reasonable jury could find otherwise.” *TriMed, Inc. v. Stryker Corp.*, 608 F.3d 1333, 1340 (Fed. Cir. 2010) (internal quotation marks omitted). In contrast, summary judgment of no invalidity is appropriate when no reasonable jury could find by clear and convincing evidence that the claims are invalid. *See Central Admixture Pharmacy Servs., Inc. v. Advanced Cardiac Solutions, P.C.*, 482 F.3d 1347, 1357-58 (Fed. Cir. 2007) (affirming district court’s grant of summary judgment of no invalidity when ACS “failed to meet its burden of coming forward with evidence to create a genuine dispute of fact” on invalidity issue).

Likewise, determining whether a particular device infringes a properly construed claim is a question of fact. *Ethicon Endo-Surgery, Inc. v. U.S. Surgical Corp.*, 149 F.3d 1309, 1315 (Fed. Cir. 1998). On summary judgment, “the issue is whether there is no genuine issue of material fact regarding infringement.” *In re Gabapentin Patent Litigation*, 503 F.3d 1254, 1259 (Fed. Cir. 2007).

Because patents are presumed valid, “the burden of persuasion to the contrary is and remains on the party asserting invalidity” -- in this case, Buyers. *PowerOasis, Inc. v. T-Mobile USA, Inc.*, 522 F.3d 1299, 1303 (Fed. Cir. 2008). In contrast, as plaintiff, Douglas Dynamics bears the burden of proving infringement by a preponderance of the evidence. *Laitram Corp. v. Rexnord Inc.*, 939 F.2d 1533, 1535 (Fed. Cir. 1991).

I. Claim 45

A. Indefiniteness

Patent law requires that claims “particularly point[] out and distinctly claim[] the subject matter which the applicant regards as his invention.” 35 U.S.C. § 112 ¶ 2 (2006). “To satisfy this requirement, the claim, read in light of the specification, must apprise those skilled in the art of the scope of the claim.” *SmithKline Beecham Corp. v. Apotex Corp.*, 403 F.3d 1331, 1340 (Fed. Cir. 2005). “Claim definiteness is analyzed ‘not in a vacuum, but always in light of the teachings of the prior art and of the particular application disclosure as it would be interpreted by one possessing the ordinary level of skill in the pertinent art.’” *Energizer Holdings, Inc. v. Int’l Trade Comm’n*, 435 F.3d 1366, 1370 (Fed. Cir. 2006).

Indefiniteness is a question of law that turns on claims construction. *Exxon Research & Engineering Co. v. United States*, 265 F.3d 1371, 1376 (Fed. Cir. 2001). The applicable

standard does not require “that claims be plain on their face in order to avoid condemnation for indefiniteness.” *Id.* at 1375. Rather, the Federal Circuit has explained:

If a claim is insolubly ambiguous, and no narrowing construction can properly be adopted, we have held the claim indefinite. If the meaning of the claim is discernible, even though the task may be formidable and the conclusion may be one over which reasonable persons will disagree, we have held the claim sufficiently clear to avoid invalidity on indefiniteness grounds.

Id. Under this standard, a claim is not indefinite “merely because it poses a difficult issue of claim construction.” *Bancorp Servs., L.L.C. v. Hartford Life Ins. co.*, 359 F.3d 1367, 1371 (Fed. Cir. 2004). A court should invalidate a claim as indefinite “only if reasonable efforts at claim construction prove futile.” *Exxon Research*, 265 F.3d at 1375.

Buyers’ only argument for invalidity under § 112 ¶ 2 is that the term “support frame” renders claim 45 indefinite. Buyers makes much of the fact that: (1) the term “support frame” is found for the first time in claim 45, and appears nowhere else in the patent (with the exception of the claims that depend from claim 45); and (2) even one of the inventors listed on the ‘700 patent, Gary E. Watson, was unable to define “support frame” during his deposition. (*See* Tucker Decl. Ex. M (dkt. #168-113) 277:20-278:14.) Buyers also relies on the testimony of Douglas’s expert, Dr. Garriss, as proof that one of ordinary skill in the art would not be able to ascertain a *specific* meaning for “support frame”:

Q: What’s the difference [between a lift frame and a support frame]?

A: Well, the – in the context of the ‘700 patent, the support frame is more broad than the lift frame. The lift frame is defined as producing a very specific function, you know, basically the lift frame is the – is the frame to which the lifting mechanism for the plow transmits its load, whereas the support frame is a much more generic frame. It includes – it could

include the lift frame, it could include a light supporting frame. It could – it could include maybe a flag – you know, a flag support – it could support anything. It’s a very broad concept, a support frame, as opposed to a lift frame. A lift frame has a specific function. A support frame has a more general function.

Q: So the lift frame’s specific function is to lift, right?

A: Correct.

Q: Okay. And support frame has a much more nebulous function?

Q: I wouldn’t say nebulous, but I would say there’s a lot of things that you might imagine that it could support. You know, it could support lights, it could support flags, it could support a lot of things. It could support a little child seat, you know.

(Tucker Decl. Ex. N (dkt. #168-14), 47:23-48:25.)

In large part, the evidence upon which Buyers relies is of little relevance. For example, Watson’s inability to define “support frame” when asked during his deposition is of limited significance to the question of indefiniteness, since indefiniteness is a matter of claims construction and “[i]t is particularly inappropriate to consider inventor testimony obtained in the context of litigation in assessing validity under section 112, paragraph 2, in view of the absence of probative value of such testimony.” *Solomon v. Kimberly-Clark Corp.*, 216 F.3d 1372, 1379 (Fed. Cir. 2000) (holding that a district court erred in using the inventor’s deposition testimony to invalidate patent claims under § 112, ¶ 2). Similarly, Dr. Garris’s testimony simply establishes that the term “support frame” is broad; it is a frame that can support a number of components, rather than being limited to supporting the load of a plow’s lifting mechanism as would a “lift frame.” “Merely claiming broadly does not render a claim insolubly ambiguous, nor does it prevent the public from understanding the

scope of the patent.” *Ultimax Cement Mfg. Corp. v. CTS Cement Mfg. Corp.*, 587 F.3d 1339, 1352 (Fed. Cir. 2009).

The only argument Buyers advances that has even arguable merit is that the term “support frame” appears nowhere else in the patent, meaning that the context of the written description is less helpful than it would otherwise be in construing this term. Still, this does not render the term insolubly ambiguous. On the contrary, when read in the context of the patent as a whole, Douglas’s proposed construction -- that a “support frame” is simply a broader category of “lift frame” that is not limited to supporting lift load but can also support other components of the blade assembly -- appears both reasonably certain and accurate. The lift frame and the support frame appear to play largely the same role with respect to the A-frame in claims 1 and 45. (*Compare* ‘700 patent, 13:27-42, *with* ‘700 patent, 18:42-56.) Furthermore, in the claims that depend from claim 45, the support frame is described as connected to a headlamp in claim 48, supporting Douglas’s contention that the support frame can support various components beyond lift load. Thus, the court declines to grant Buyers summary judgment on indefiniteness grounds.

B. Anticipation

“A patent is invalid for anticipation if a *single* prior art reference discloses each and every limitation of the claimed invention.” *Schering Corp. v. Geneva Pharm.*, 339 F.3d 1373, 1377 (Fed. Cir. 2003) (emphasis added). That which would literally infringe if produced after patenting anticipates if produced before. *Bristol-Myers Squibb Co. v. Ben Venue Labs., Inc.*, 246 F.3d 1368, 1378 (Fed. Cir. 2001). Each limitation may be found either expressly or inherently in the prior art reference, since inherency places matter in the public domain

as well as express disclosure. *Schering Corp.*, 339 F.3d at 1379. While “the teaching in the prior reference need not be *ipsissimis verbis*,” *Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 716 (Fed. Cir. 1984), but “[t]he elements must be arranged or combined in the same way as in the claim.” *Whitserve, LLC v. Comp. Packages, Inc.*, 694 F.3d 10, 21 (Fed. Cir. 2012) (quoting *In re Gleave*, 560 F.3d 1331, 1334 (Fed. Cir. 2009) (internal quotation marks omitted)).

Finally, the court notes that when determining the validity of the claims of a patent, each claim must be considered separately. *See Rosco, Inc. v. Mirror Lite Co.*, 304 F.3d 1373, 1379-80 (Fed. Cir. 2002). Every claim, even a claim in dependent form, is presumed valid independently of the validity of other claims. *Id.*

Buyers argues that Claim 45 is invalid as anticipated by U.S. Patent No. 4,187,624 (“the ‘624 patent”). Douglas does not dispute that the ‘624 patent includes “a vehicle having a frame member and a bumper,” a “mounting frame fixed to the frame member and located generally behind the bumper,” and a “snowplow blade assembly including an A-frame and a snowplow blade fixed to the A-frame,” but argues that the ‘624 patent does not disclose the “support frame” element of claim 45. (Pl.’s Resp. to DPFOF (dkt. #195) ¶¶ 9, 11, 13.)² In response, Buyers points to the “bell crank assembly” in the ‘624 patent as disclosing the “support frame connected to the A-frame” limitation of the ‘700 patent.

The bell crank assembly is labeled 85 in Figure 1 of the ‘624 patent:

² Douglas’s brief also refers to the “mounting means for selectively connecting the A-frame to the mounting frame for pivotable movement about a generally horizontally extending pivot axis and for affording removal of the A-frame and the lift frame from the mounting frame as a unit so as to leave the [mount] mounting frame on the vehicle and behind the bumper” as being a missing limitation “required by all asserted claims.” (Pl.’s Opp’n (dkt. #194) 5.) Claim 45 does not claim the “mounting means” at issue, however. Rather, it claims a structure “*wherein the A-frame and the support frame are connected to the mounting frame*” for the required pivotable movement. (See Pl.’s Resp. to PFOF (dkt. #195) ¶ 76 (noting that “claim 45 does not require the ‘mounting means’ of claim 1”).)

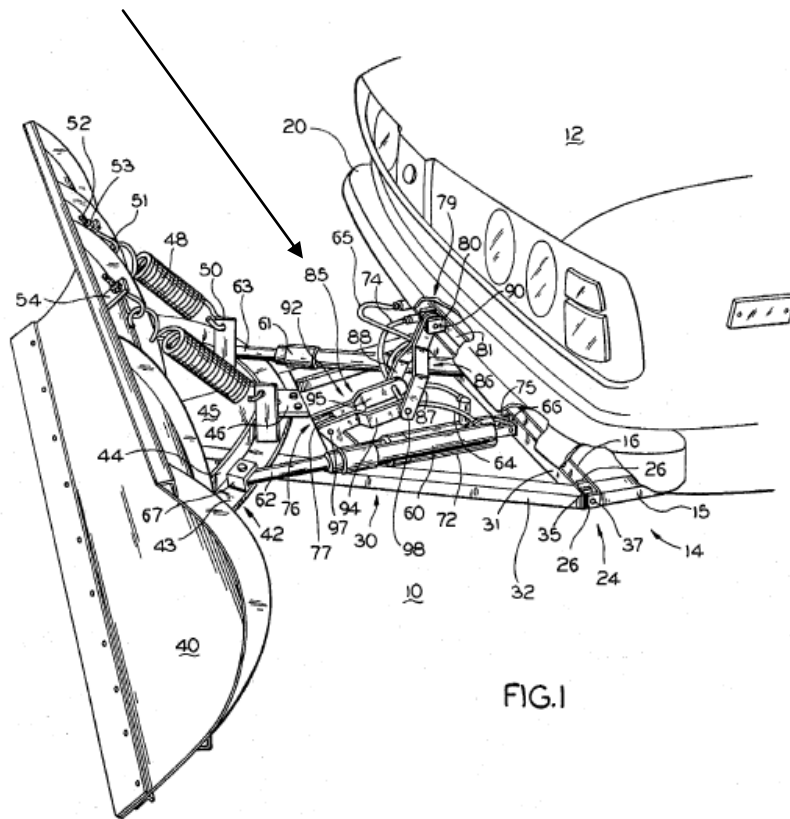
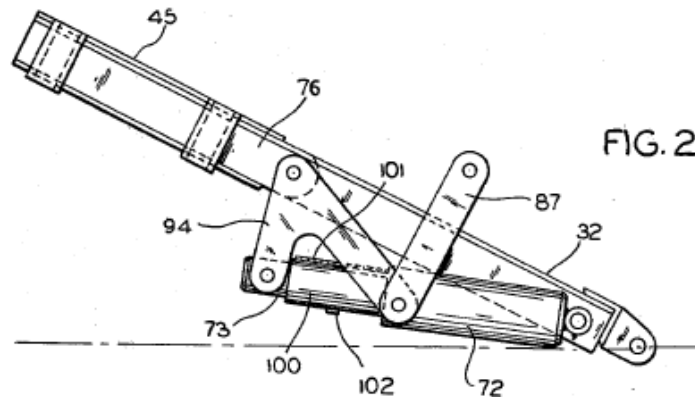


FIG.1

The written description of the bell crank assembly includes “a first generally Y-shaped link member 86 which includes symmetrical side plates 87 and 88.” (‘624 patent, 5:29-31.) Plates 87 and 88 are welded to one another at the top of the Y-shaped link and fit between the plates 80 of bracket 79, which is located behind the vehicle’s bumper. (See ‘624 patent, 5:18-20, 31-34.) The bell crank assembly also includes a second link, link 92, which is made of a pair of L-shaped side members, 94 and 95. Those members are pivotally mounted to bracket 76 and to link 86. The shorter portions of members 94 and 95 are pivotally coupled between bracket 76 and the end of piston rod 73. (See ‘624 patent, 5:38-47.)

A side view of a portion of the bell crank assembly, shown in conjunction with the piston rod, is shown in Figure 2 of the ‘624 patent:



Through this assembly, extension of piston rod 73 pushes link 92 (made up of side members 94 and 95) forward, which causes the snowplow blade 40 and support 30 to tilt upward. ('624 patent, 5:47-51.)

As an initial matter, Douglas argues that the bell crank assembly does not constitute a “frame” as that term is ordinarily defined. Recognizing that “dictionary definitions may establish a claim term’s ordinary meaning,” *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002), Douglas proffers two dictionary definitions. Douglas relies on Webster’s Third New International Dictionary, which defines “frame” as “a basic structural unit onto or into which other constituents of a whole are fitted, to which they attach, or with which they are integrated,” and the Encarta English Dictionary (North American Edition), which defines “frame” as “supporting structure: an underlying or supporting structure that consists of solid parts such as beams or struts with spaces between them and has something built around or on top of it.” (See Pl.’s Mot. Summ. J. (dkt. #121) 14 n.3; Garris Decl. Exs. C2, C3 (dkt. ##124-21, -22).) In contrast, Douglas argues, the bell crank assembly of the ‘624 Patent: (1) is described not as a “frame” but as an “assembly”; and (2)

is not a rigid structural unit that supports other parts but is instead an “assembly of movable linkages.”

The court does not find either distinction particularly persuasive. The mere fact that the bell crank assembly is *described* as an “assembly” rather than a “frame” is essentially irrelevant, since, as previously noted, “the reference need not satisfy an *ipsissimis verbis* test.” *Whitserve, LLC*, 694 F.3d at 21 (quoting *In re Gleave*, 560 F.3d at 1334)). Likewise, Douglas’s focus on dictionary definitions seeks to answer the wrong question.³ The court must determine not whether the bell crank assembly is a “frame” based on a dictionary definition, but rather whether it is a “*support* frame,” a limitation properly construed based on the entire ‘700 patent. Furthermore, the court must determine, assuming the ‘624 patent discloses a “support frame,” whether it is “arranged or combined in the same way” as the support frame of the ‘700 patent. *See Whitserve, LLC*, 694 F.3d at 21.

With respect to these more important questions, Buyers’ invalidity argument breaks down. Though Buyers glosses over the point, a lift frame (and thus, the comparable support frame) does not merely support a plow’s lift load, it supports other components as well. To accomplish this function, a lift frame remains *fixed to the vehicle* during plowing:

While the lift frame remains pivotable relative to the A-frame, the lift frame, during plowing, is fixed to the vehicle so that lights and other accessories which may be mounted on the lift frame remain fixed relative to the vehicle during plowing and during stacking of snow.

(‘700 patent, 3:24-29.) The detailed description of the drawings in the ‘700 patent confirms this:

³ It is also not clear that the bell crank assembly of the ‘624 patent *does* fall outside the dictionary definitions Douglas offers.

In general, and as more specifically discussed below, when the lift frame assembly 24 is fixed to one of the mounting frame assemblies 16, 56, the lifting frame assembly supports the lights 149 in fixed position relative to the vehicle and affords the raising and lowering of the snowplow assembly 18.

(‘700 patent, 8:63-9:1.)

The patent emphasizes the importance of this feature yet again in describing the lighting fixture in relation to the lift frame assembly:

As mentioned above, when the lift frame assembly 24 is mounted on one of the mounting frame assemblies 16, 56, the lighting fixture 160 is fixed to the vehicle in a position over the snowplow blade 20. Such positioning and support of the lighting fixture 160 provides a lighting fixture 160 that is operational during plowing of snow and that is removable from the vehicle as a unit with the snow plow assembly 18. It is operational in the sense that the lights are above the plow in both its upper position (travel/stacking) and lower position (plowing) and thus the plow blade does not interfere with the light rays. Also, the lights being fixed relative to the vehicle, their orientation is not affected by movement of the plow blade.

(‘700 patent, 10:44-56.)

This same requirement applies with equal or greater force to the support frame, which may support any number of components, including lights (as confirmed by dependent claim 48). Thus, the court concludes that the plain and ordinary meaning of “support frame,” to a person of ordinary skill in the art, would require it to remain in a fixed position relative to the vehicle, to “support” various assembly components

In contrast, the bell crank assembly of the ‘624 patent does not -- indeed, cannot -- play such a role. As discussed above, the bell crank assembly of the ‘624 patent is *not* fixed to the vehicle. In fact, it functions by *moving* relative to the vehicle: the hydraulic cylinder pushes the L-shaped member of the bell crank assembly forward, which in turn pushes the

blade upward to shovel and stack snow. Furthermore, the drawings in the ‘624 patent show that the bell crank assembly is not located above the blade. (See ‘624 patent, Figure 1.) This means that it cannot support components like lights or spray canopies, since those structures would constantly be shifting as the plow blade moved vertically and indeed would be blocked by the blade itself. (See Garriss Decl. (dkt. #124) ¶ 103.)

Given these crucial differences, the court cannot say that Buyers has demonstrated by clear and convincing evidence that the ‘624 patent discloses the “support frame” of the ‘700 patent. Nor does the expert report of Dr. Joseph M. Prahll rescue Buyers’ argument: it is wholly conclusory in equating the “bell crank assembly” to a “support frame” and “lift frame.” (See May 5, 2010 Prahll Expert Report (dkt. #124-15) ¶¶ 107, 159.) Buyers does not even address the fact that the bell crank assembly functions by moving relative to the vehicle. Thus, Buyers has failed to meet its burden, and its motion for summary judgment of invalidity will be denied as to claim 45.

This does not conclude the court’s analysis, however. Douglas has also moved for summary judgment of *no* invalidity, meaning the court must determine whether Buyers has produced enough evidence to allow a reasonable jury to find that claim 45 is invalid. In the context of cross-motions for summary judgment on patent validity, the Federal Circuit has cautioned district courts to remember that “the denial of a party’s motion for summary judgment of invalidity is not sufficient to justify a reciprocal grant of summary judgment of no invalidity to the other party.” *Mikkelsen Graphic Eng’g, Inc. v. Zund Am., Inc.*, 541 F. App’x 964, 973 (Fed. Cir. 2013); *see also Vita-Mix Corp. v. Basic Holding, Inc.*, 581 F.3d 1317, 1331-32 (Fed. Cir. 2009) (“[A] district court cannot rely on its assessment of one party’s motion for summary judgment of invalidity when evaluating the other party’s motion for

summary judgment of no invalidity.”). Accordingly, the court turns to Buyers’ opposition to Douglas’s motion.

For purposes of claim 45, Buyers has relied entirely on the same argument it advanced in support of its own motion: claim 45 is anticipated by the ‘624 patent. (*See* Prahl Invalidity Report (dkt. #168-12) ¶¶ 156-59.) Yet no reasonable jury could find that the ‘624 patent discloses a “support frame” as used on the context of ‘700 patent for reasons already discussed above. As a result, no reasonable jury could find that the ‘624 patent anticipates claim 45, because it does not disclose each and every element of that claim, arranged or combined in the same way.

Summary judgment is the “‘put up or shut up’ moment in a lawsuit, when a party must show what evidence it has that would convince a trier of fact to accept its version of events.” *Johnson v. Cambridge Indus., Inc.*, 325 F.3d 892, 901 (7th Cir. 2003) (quoting *Schacht v. Wis. Dep’t of Corr.*, 175 F.3d 497, 504 (7th Cir. 1999)). By moving for summary judgment of no invalidity, Douglas placed Buyers on notice that it must come forward with all of its evidence. Nevertheless, Buyers relied solely on its theory that the ‘624 patent anticipated claim 45. Because the court has rejected that argument, and because Buyers has put forth no other evidence of anticipation (or any other basis for invalidity), the court will grant Douglas’s motion for summary judgment of no invalidity.

II. The Dependent Claims

A. Infringement

As noted above, “[i]nfringement, whether literal or under the doctrine of equivalents, is a question of fact.” *Absolute Software, Inc. v. Stealth Signal, Inc.*, 659 F.3d 1121, 1129-30 (Fed. Cir. 2011) (citing *Bai v. L & L Wings, Inc.*, 160 F.3d 1350, 1353 (Fed. Cir. 1998)).

Summary judgment may nevertheless be appropriate “when no reasonable jury could find that every limitation recited in a properly construed claim either is or is not found in the accused device either literally or under the doctrine of equivalents.” *U.S. Philips Corp. v. Iwasaki Elec. Co.*, 505 F.3d 1371, 1374-75 (Fed. Cir. 2007) (quoting *PC Connector Solutions LLC v. SmartDisk Corp.*, 406 F.3d 1359, 1364 (Fed. Cir. 2005)). An infringement analysis involves two steps. First, the claim must be properly construed to determine its scope and meaning. Second, the claim as properly construed must be compared to the accused device or process. *Absolute Software, Inc.*, 659 F.3d at 1129. Claims construction in this case is complete; the court need only consider the second step of the infringement analysis.

“Literal infringement requires that each and every limitation set forth in a claim appear in an accused product.” *V-Formation, Inc. v. Benetton Grp. SpA*, 401 F.3d 1307, 1312 (Fed. Cir. 2005). “If any claim limitation is absent from the accused device, there is no literal infringement as a matter of law.” *Bayer AG v. Elan Pharm. Research Corp.*, 212 F.3d 1241, 1247 (Fed. Cir. 2000).

Both parties moved for summary judgment on infringement grounds. (See dkt. ## 158, 170.) Buyers’ sole argument with regard to dependent claims 47, 48, 49 and 51 comes down to a single, flawed premise: because claim 45 is not itself infringed, neither can the *dependent* claims be infringed, since all of claim 45’s limitations are incorporated into each of the dependent claims, as required by 35 U.S.C. § 112, ¶ 4. (See Def.’s Br. Supp. Mot. Summ. J. Non-Infringement (dkt. #171) 47; Prah Noninfringement Chart 2 (dkt. #175-10) 11-13.) The fatal flaw is that the Federal Circuit already found that Buyers’ products *do* meet all of the limitations of claim 45. Accordingly, Buyers’ motion for summary judgment of non-infringement is denied.

Next, Douglas moves for summary judgment of infringement on all the asserted dependent claims, referring the court to its expert report on infringement. (*See* Pl.’s Br. Supp. Mot. Summ. J. Infringement (dkt. #159) 38.) Mindful of the Federal Circuit’s mandate, the court does not revisit whether Buyers’ products contain each of the claim 45 limitations, but instead focuses its analysis on the *additional* limitations that each dependent claim features to determine if Buyers’ products infringe those dependent claims as a matter of law.

i. Claim 47

As noted above, claim 47 depends from claim 45 and adds two limitations: the “support frame, when connected to said mounting frame, includes an extension in front of and above said bumper”; and an “actuator connected to said support frame and said A-frame to pivot said A-frame about said pivot axis.” (‘700 patent, 19:14-21.) Douglas’s expert Charles Garris will opine that Buyers’ snowplow blade assemblies include the first limitation, pointing specifically to Figure 1 of Buyers’ ‘718 patent:

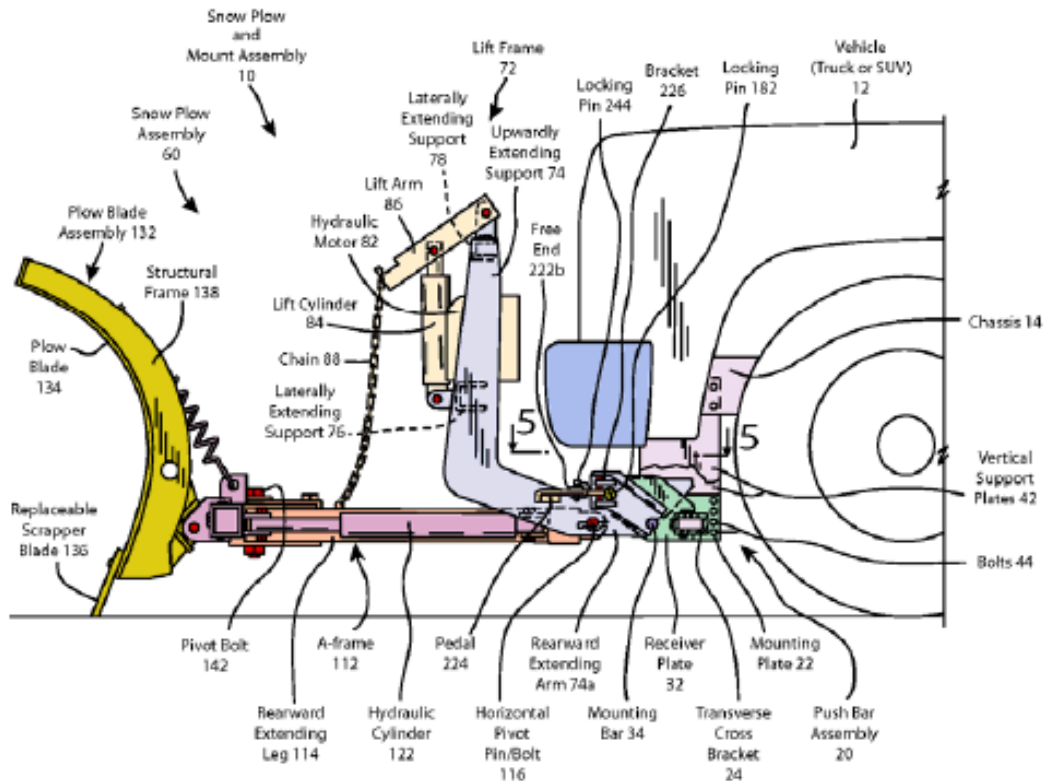
US Patent No. 7,562,718

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July 21, 2009

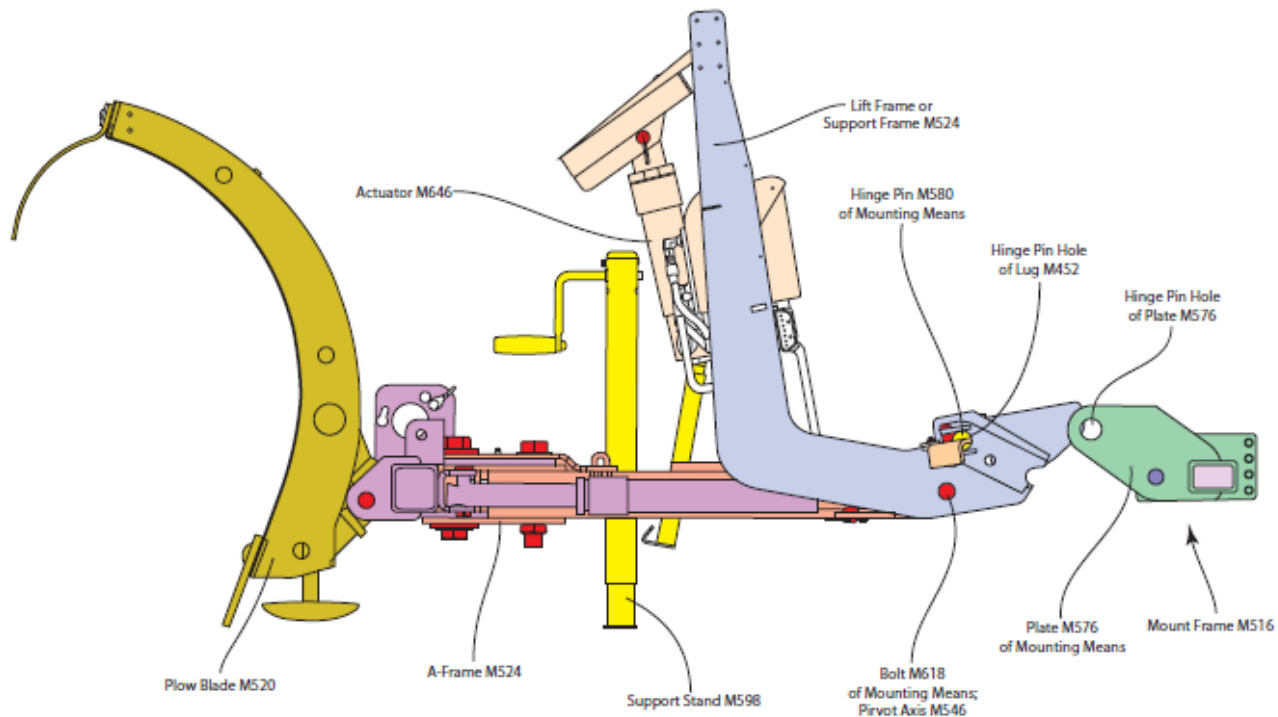
Fig. 1 (Modified)

(DD 020733)



(Garris Report Vol. 3 (dkt. #128) ¶ 60.) The “upwardly extending support,” labeled 74 in the modified figure, is an “extension in front of and above” the vehicle bumper. Buyers does not dispute that its products literally contain this element. (*See* Def.’s Resp. to PPFOF (dkt. #193) ¶ 154.)

Claim 47 also includes another element: “an actuator connected to said support frame and said A-frame to pivot said A-frame about said pivot axis.” The Federal Circuit found Buyers’ products allow for this pivotable movement of the A-frame around a generally horizontally extending pivot axis, since that requirement is contained within infringed claim 45. It is also readily apparent that Buyers’ products include an actuator, as shown in Garris’ demonstrative exhibits 8a through 10b:

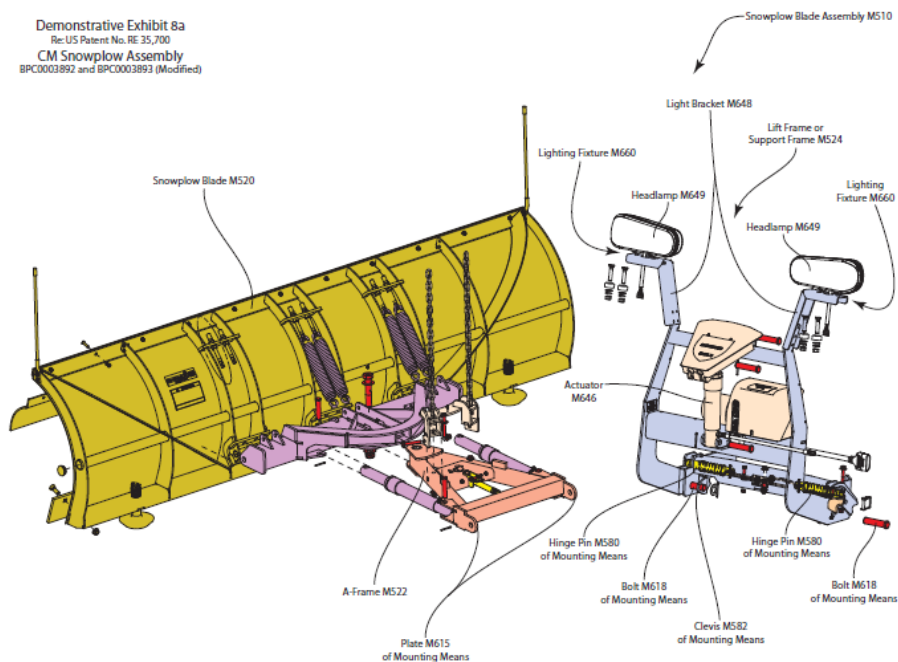


(Dkt. #126-4) (actuator labeled M646). Given the Federal Circuit’s construction of “connected to” as encompassing both direct and indirect connections, it is also clear that the actuator is connected to the support frame (blue), and to the A-frame (pink) via the support frame, in order to accomplish the pivotal movement described in claim 45. Accordingly, Douglas is entitled to summary judgment of infringement on claim 47.

ii. Claim 48

Claim 48 also depends from claim 45 and adds only the additional limitation of “a headlamp connected to said support frame and removable with said A-frame and said support frame.” (‘700 patent, 19:23-25.) As Douglas’s expert, Charles Garriss, points out, Buyers’ CM, VX, MD and HD/EX Snowplow Assemblies include headlamps (labeled M649 on Garriss’ diagrams) that are connected to two light brackets (M648), which are in turn

connected to the support frame (M524). Pictured below, as an example, is Garriss' diagram of the CM Snowplow Assembly:



(Demonstrative Ex. 8a (dkt. #126-4) 1).

As Garriss explains, the headlamps are indirectly connected to the support frame by means of the light brackets. The Federal Circuit has confirmed that the plain language of “connected to” encompasses such indirect connections. *See Douglas Dynamics, LLC*, 717 F.3d at 1342. Furthermore, the Federal Circuit has already found that Buyers’ products allow for the removal of the A-frame and the support frame as a unit by finding infringement of claim 45.⁴ Buyers points to no evidence to the contrary in response. Indeed, Buyers concedes in its responses to Douglas’s proposed findings of fact that the “specific features of claim 48” are present in its products. (*See* Def.’s Resp. to PPFOF (dkt.

⁴ “Since the headlamps (M649) are connected to the support frame (M524), the headlamps (M649) are removable with the A-frame (M522) and the support frame (M524).” (Garriss Decl. (dkt. #128) ¶ 62.)

#193) ¶ 155.) Therefore, no reasonable jury could find for Buyers, and claim 48 is infringed as a matter of law.

iii. Claim 49

Claim 49 depends from claim 45 and adds the following additional limitation:

[I]ncluding a support stand connected to said snowplow blade assembly and extending therefrom for ground engagement to support said snowplow blade assembly when detached from said vehicle, said support stand connected to said snowplow blade assembly for movement to store said support stand when said snowplow blade assembly is attached to said vehicle.

(‘700 patent, 19:27-33.) Garriss’ expert report points to Buyers’ ‘718 patent, in which Figure 3 shows the snowplow assembly 10 in a detached state and set on a road bed surface 16. The support stand is labeled 156:

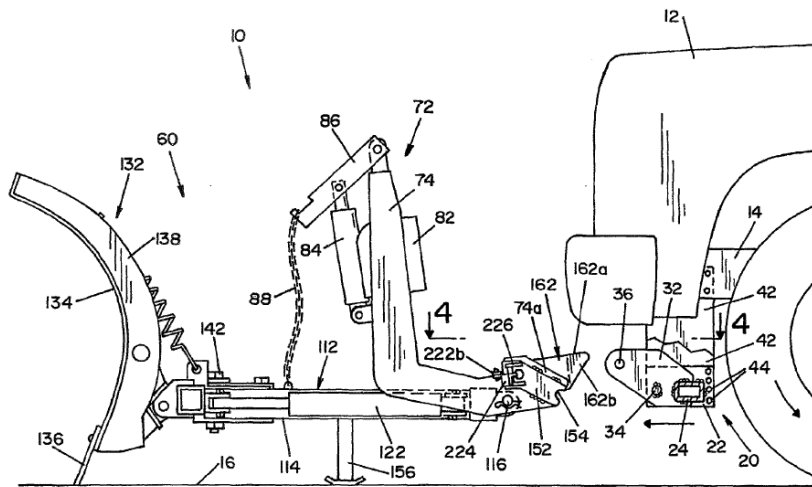
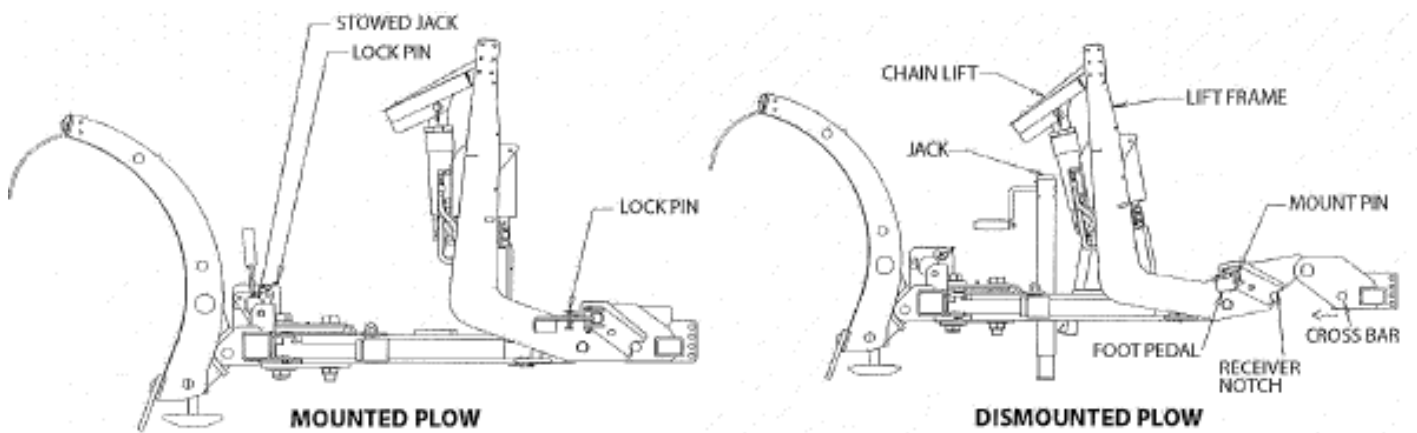


FIG. 3

(Garris Ex. App. C Ex. 7 (dkt. #126-30) Figure 3.) Garris' diagrams of the Buyers products feature this support leg as well. (*See* Demonstrative Exs. 8a-10b (dkt. #126-4).)

Garris then points to the HD/EX owner's manual, which shows how the plows contain a "jack" from which the support leg extends in the unmounted state. The instructions indicate that after mounting, the user should "retract the jack enough to allow its removal," "rotate the jack to disengage from the jack mount plate" and "stow the jack on the sector mounted stow plate."



(Garris Ex. App. C Ex. 1 (dkt. #126-24).)

Therefore, Garris opines that not only is the support leg (jack) connected to the assembly so as to provide "ground engagement" in the unmounted state, but it is also connected to the assembly for movement to store the jack on the "sector mounted stow plate" when the assembly is attached to a vehicle. Again, Buyers presents no evidence to contradict this opinion, conceding that the SnowDogg snowplow assembly provides "the specific features of claim 49." (Def.'s Resp. to PPFOF (dkt. #193) ¶ 156). Douglas is therefore entitled to summary judgment of infringement on this dependent claim as well.

iv. Claim 51

Finally, claim 51 depends from claim 45 and adds the following additional limitation:

[W]herein the snowplow blade assembly includes a support stand for supporting the A-frame in a generally horizontal position and, when the A-frame is not connected to the mounting frame, for selectively adjusting the vertical position of the snowplow blade assembly.

(‘700 patent, 19:42-20:4.)

In Buyers’ products, Garris’s expert report notes that the support stand (jack) of the assembly is connected to the assembly through the jack plate when the assembly is detached and engages with the ground to support the A-frame in a generally horizontal position (as in the “Dismounted Plow” diagram above). He also notes that in the detached position -- that is, “when the A-frame is not connected to the mounting frame” -- per the instructions, the jack may be extended or retracted to selectively adjust the vertical position of the assembly. (Garris Ex. App. C Ex. 1 (dkt. #126-24) BPC0003869.) Buyers presents no evidence to combat Garris’ testimony and concedes that its SnowDogg snowplow assembly contains “the specific features of claim 51” (Def.’s Resp. to PPFOF (dkt. #193) ¶ 157). Accordingly, Douglas is entitled to summary judgment of infringement of claim 51.

B. Invalidity Based on Obviousness

Having found that dependent claims 47, 48, 49 and 51 are infringed, the court next considers whether those claims are valid. Buyers contends that all the dependent claims are invalid as obvious.⁵ While sympathetic to this contention on an abstract basis, given that the claims cover such seemingly rudimentary features as adding lights and a support stand, a claim is deemed legally invalid for obviousness if the differences between the subject matter

⁵ Buyers has also asserted that all the dependent claims are invalid as indefinite “for the same reasons as claim 45.” (See Def.’s Br. Opp’n Summ. J. & Br. Supp. Summ. J. Invalidity (dkt. #167) 29, 30, 31, 32.) The court has already rejected that argument, *see* discussion, *supra*, Section I.A., and need not consider it further.

sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. 35 U.S.C. § 103(a). More importantly for purposes of this analysis, “a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007). Rather, in evaluating such combinations, “it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does.” *Id.*

The Federal Circuit has frequently employed the teaching, suggestion or motivation (“TSM”) test in assessing obviousness, asking whether there is evidence of a teaching, suggestion or motivation to combine known elements from the prior art. Still, the TSM test, while a “helpful insight,” is not a “rigid and mandatory formula[.]” *Id.* at 418-19. The court must keep in mind that “[a] person of ordinary skill in the art is also a person of ordinary creativity, not an automaton,” *id.* at 421, and may “take account of the inferences and creative steps that a person of ordinary skill in the art would employ” in evaluating obviousness, *id.* at 418. A “combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *Id.* at 416.

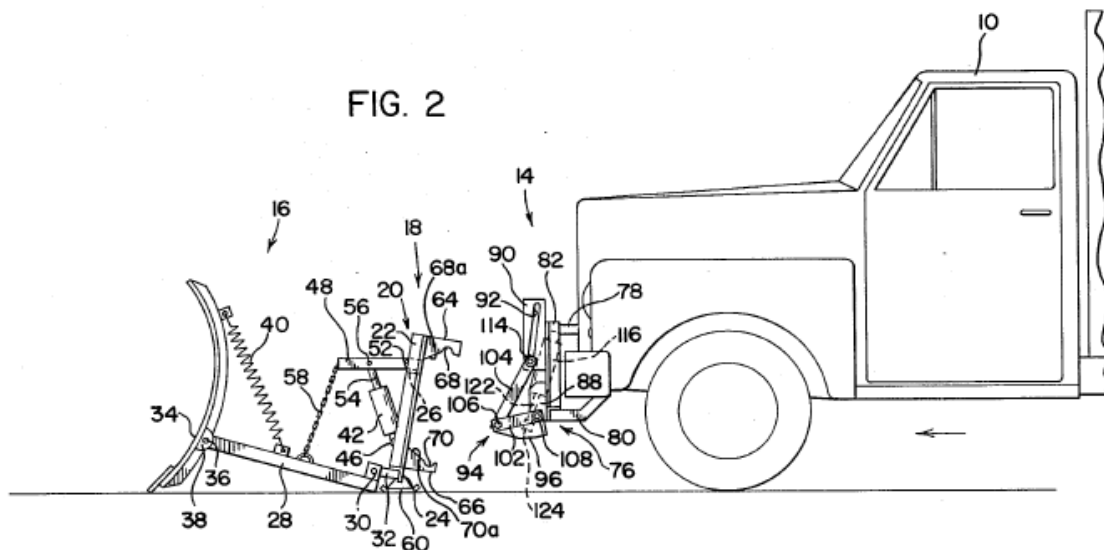
As an initial matter, Buyers’ failure to establish the invalidity of independent claim 45 is essentially fatal to its obviousness arguments as to dependent claims 47, 48, 49 and 51. *See Callaway Golf Co. v. Acushnet Co.*, 576 F.3d 1331, 1344 (Fed. Cir. 2009) (“A broader independent claim cannot be nonobvious where a dependent claim stemming from that independent claim is invalid for obviousness.”) (citing *Ormco Corp. v. Align Tech., Inc.*, 498

F.3d 1307, 1319 (Fed. Cir. 2007)). The Federal Circuit decision in *Callaway* seems to dictate that finding claims 47, 48, 49 or 51 invalid as obvious would compel the conclusion that claim 45 is likewise obvious -- but Buyers failed entirely to argue or present *any* evidence that claim 45 was obvious, even in the face of Douglas's summary judgment motion, which required Buyers to come forward with all arguments and evidence supporting a finding of invalidity as to claim 45. Buyers did not even cursorily argue claim 45 was obvious on the same grounds as the dependent claims. Case law does not allow for such an "irreconcilable inconsistency." *Id.* at 1345. Buyers' claims of obviousness, therefore, fails simply by virtue of its decision to eschew an obviousness defense and rely entirely on its unsuccessful defense of anticipation with respect to claim 45.

Of course, *Callaway* espouses a principle that is in essence the mirror image of this case. In *Callaway*, the Federal Circuit noted that where a dependent claim is invalid for obviousness, so, too, must the independent claim be obvious, while this case would involve a finding that the dependent claim is *not* obvious based on the validity of the independent claim. Therefore, the court will also consider each of the prior art combinations that Buyers asserts demonstrate by clear and convincing evidence that the dependent claims are obvious.

i. Claim 47

For example, Buyers asserts that claim 47 is invalid as obvious based on the combination of the '624 patent and U.S. Patent No. 4,236,329 ("the '329 patent"). The '329 patent, directed toward a "detachable blade mounting device," includes a support frame extending in front of and above the vehicle bumper, as shown in Figure 2 of that patent:



Specifically, the "frame assembly 20," when connected to "vehicle portion 14," extends in front of and above the vehicle's bumper. Additionally, the '329 patent discloses an actuator ("hydraulic cylinder device 42") connected to the support frame and an A-frame that, as described in the patent, pivots the A-frame about a pivot axis:

Hydraulic cylinder 42 includes an extendable piston rod 54 having its outer end connected to lift arm 48 generally at the center thereof by a pin or bolt 56. A link chain 58 is connected between the outer end of lift arm 48 and legs 28 of the A-frame. When hydraulic cylinder 42 is operated to extend rod 54, lift arm 48 pivots about pin 50 causing chain 58 to raise snow plow blade 34 from the roadway. Retraction of the piston rod results in lowering of lift arm 48 and the plow blade. Such movement of the plow blade occurs as pivotal motion about pins 30.

(‘329 patent, 4:31-49.)

Douglas agrees that the ‘329 patent discloses an actuator connected to a support frame and an A-frame, and that it describes using that actuator to pivot the A-frame about the pivot axis. (Pl.’s Resp. to DPFOF (dkt. #195) ¶ 89.) Nevertheless, Douglas argues that Buyers has not met its burden to show obviousness, because Buyers provides *no* explanation as to why a person of ordinary skill in the art would combine the ‘624 and ‘329 patents by substituting the rigid, upwardly-extending “frame assembly” of the ‘329 patent for the bell crank assembly of the ‘624 patent. Indeed, Douglas argues, the ‘624 patent explicitly *teaches away* from utilizing an upwardly extending frame assembly, calling it an existing but unsatisfactory system for vehicle-mounted snowplow assemblies in the “Background of the Invention” section:

[S]uch plows also include a bulky, view-obstructing plow lifting system mounted immediately adjacent the front end of the vehicle which includes a hydraulic cylinder oriented upwardly to engage a lifting arm which in turn is coupled to the plow by a chain. Extension of the cylinder causes the arm to be elevated which in turn causes the chain to lift the plow blade above the road surface. This type of lift system, both because of its bulk and because of its tendency to shift weight off the back wheels of the vehicle, make this type of plow unsuitable for smaller vehicles such as cars.

(‘624 patent, 1:44-55.)

“A reference that properly teaches away can preclude a determination that the reference renders a claim obvious.” *In re Mouttet*, 686 F.3d 1322, 1333 (Fed. Cir. 2012). A reference teaches away “when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a

direction divergent from the path that was taken by the applicant.” *Id.* at 1333-34 (quoting *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994)).

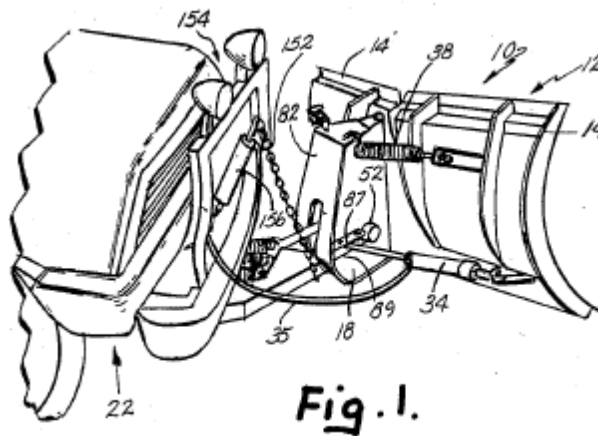
Here, the ‘624 patent unquestionably discourages persons of ordinary skill in the art from combining the rigid, upwardly-extending frame assembly/“support frame” of the ‘329 patent with the other elements of the snowplow assembly depicted in the ‘624 patent.⁶ Beyond a conclusory (and incorrect) assertion that the two patents together disclose each and every limitation of the ‘700 patent -- not in and of itself enough to show obviousness -- Buyers offers no additional evidence of obviousness. For this reason, Buyers has failed to meet its burden, and its motion for summary judgment of invalidity with respect to claim 47 is denied.

The court will also grant Douglas’s summary judgment motion of *no* invalidity with respect to claim 47. Buyers again relies solely on the combination of the ‘329 and ‘624 patents to combat Douglas’s motion. (*See* Def.’s Br. Opp’n Summ. J. & Br. Supp. Summ. J. Invalidity (dkt. #167) 29-30.) The ‘624 patent teaches away from employing lift/support frames that extend upward, potentially obscuring the driver’s view and unbalancing the vehicle, and Buyers again offers no other reason why a person of ordinary skill in the art might nevertheless be motivated to combine the support frame and actuator of the ‘329 patent with the ‘624 patent. On this record, no reasonable jury could find claim 47 obvious, and so Douglas is entitled to summary judgment of no invalidity.

⁶ Buyers’ argument that the ‘624 patent does not teach away from lift frames in general but merely discloses a new type of lift frame that does not result in the deficiencies of previous lift frames assumes a far broader construction of “lift frame” and “support frame” than this court has adopted, and also would ignore the principal advance of that patent.

ii. Claim 48

Buyers asserts that claim 48 is obvious in light of the combination of the '624 patent and U.S. Patent No. 4,658,519 (the '519 patent). This argument relies in part on Buyers' assertion that the '624 patent discloses a support frame, which the court has rejected. Buyers does point out -- and Douglas agrees (Pl.'s Resp. to DPFOF (dkt. #195) ¶ 95) -- that the '519 patent discloses a light fixture including headlamps located above the snowplow blade:



It would have been obvious to a person of ordinary skill in the art, Buyers argues, to think of combining the teachings of these two patents such that the headlamp was connected to the “support frame” in the '624 patent (meaning the bell crank assembly), allowing for a lighted snowplow while facilitating the removal of the entire assembly as a unit. (*See* Def.'s Br. Opp'n Summ. J. & Br. Supp. Summ. J. Invalidity (dkt. #167) 30.)

In opposition, Douglas points out that the '519 patent features headlamps located on a “conventional lifting apparatus 154” that is mounted to the front of the vehicle. (*See* '519 patent, 6:62-63.) That lifting apparatus, like the “support frame” of the '700 patent, is fixed in place relative to the vehicle, unlike the bell crank assembly, which moves with

respect to the vehicle. Therefore, Douglas's expert testified, no person of ordinary skill in the art would think of connecting the headlamps of the '519 patent to the "bell crank assembly" of the '624 patent, since the "bell crank assembly" does not remain fixed relative to the vehicle, nor can it support anything over the plow blade. (Garris Decl. (dkt. #124) ¶ 107.) The lights "would constantly be changing in orientation as the plow blade was moved vertically because of the required movement of the bell crank assembly." (*Id.* at ¶ 103.)

The court agrees. A person of ordinary skill in the art would have no reason to attach the lights of the '519 patent to the bell crank assembly of the '624 patent, given that the bell crank assembly (1) functions by moving relative to the vehicle; and (2) is located below the plow blade in any event. Furthermore, nothing in the '624 patent describes using the bell crank assembly for mounting or support purposes.

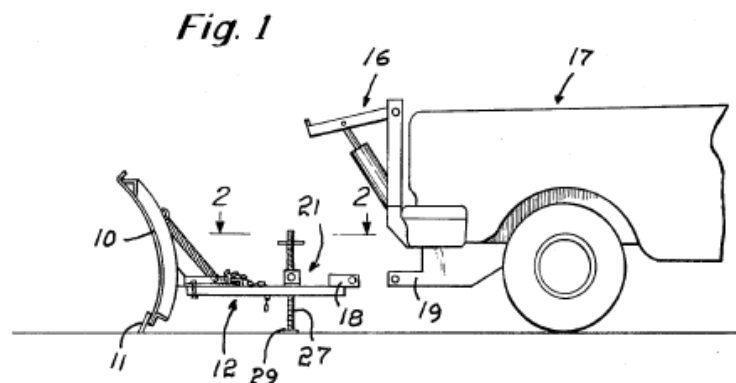
Again, it may seem a matter of pure common sense to add lights to *any* snowplow assembly to permit lighted plowing. But "[t]he mere recitation of the words 'common sense' without any support adds nothing to the obviousness equation." *Mintz v. Dietz & Watson, Inc.*, 679 F.3d 1372, 1377 (Fed. Cir. 2012). Here, the only argument Buyers has offered rests on an erroneous interpretation of what constitutes a "support frame" and a bald, unsupported assertion that a person of ordinary skill in the art would think to place headlamps on a constantly-moving component of a snowplow assembly. The court credits neither of these positions as clear and convincing, and Buyers' motion for summary judgment of invalidity is denied as to claim 48.

Unfortunately for Buyers, it has offered no *additional* evidence to defeat Douglas's own motion for summary judgment of no invalidity, relying entirely on the combination of

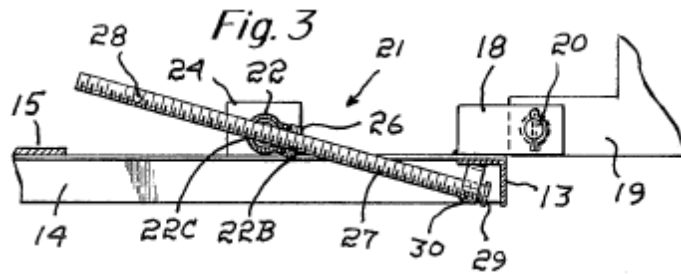
the '519 and '624 patents. A district court “is not required to scour the party’s various submissions to piece together appropriate arguments” on summary judgment. *Little v. Cox’s Supermarkets*, 71 F.3d 637, 641 (7th Cir. 1995). No reasonable jury could find on the evidence Buyers has presented that claim 48 was obvious, given that these two references combined are missing the requisite “support frame” on which the person of ordinary skill would have to think to place a headlamp. While the idea of headlamps *alone* may seem obvious, the court “need not consider ... arguments that certain dependent claim *limitations* would have been obvious where the base claim has not been proven invalid.” *SynQor, Inc. v. Artesyn Techs., Inc.*, 709 F.3d 1365, 1375 (Fed. Cir. 2013) (emphasis added). Without more from Buyers, Douglas is entitled to summary judgment of no invalidity on this claim.

iii. Claim 49

Buyers argues that claim 49 is obvious in light of the combination of the '624 patent with U.S. Patent No. 4,205,825 (“the '825 patent”), which is directed at a “jack for snow plow frames” and discloses a support leg pivotally supported by the A-frame, extending from the assembly to the ground to support the assembly when the plow is unmounted:



Additionally, the jack unit of the '825 patent is extended through a “keeper” (labeled 30 in Figure 3, below) when the plow is mounted and in use:



Douglas disputes that the combination of the '624 patent with the '825 patent discloses each and every limitation of claim 49 (Pl.'s Resp. to DPFOF (dkt. #195) ¶ 101), directing the court to the Garris declaration, which indicates that the '624 patent does not disclose a lift frame, and that the '825 patent does not cure those deficiencies. (Garris Decl. (dkt. #124) ¶¶ 88-89.) The court agrees. While the '825 patent certainly appears to disclose the required *additional* requirements of claim 49 (and Garris does not opine otherwise), the '624 patent does not, as previously discussed, disclose a "support frame" and in fact explicitly teaches away from using such frames. The court therefore cannot say that the combination of the '825 patent and the '624 patent is clear and convincing evidence that the invention of the '700 patent is obvious, at least not without more than Buyers has offered here. And again, while the "support stand," taken alone, seems obvious, the court need not consider arguments directed at single dependent claim limitations when the claim as a *whole* has not been proven invalid. *See SynQor*, 709 F.3d at 1375.

As discussed above, Buyers was placed on notice to come forward with all of its evidence with regard to invalidity of this claim in response to Douglas's mirror image cross-motion on claim 49. Since its only response was to offer the '624 patent and the '825 patent -- with little to no explanation as to why those two references make claim 49 obvious, particularly in light of the lack of support frame and the '624 patent's teaching

away from using support frames -- Douglas's motion for summary judgment of no invalidity will be granted with respect to claim 49.

iv. Claim 51

Finally, as with claim 49, Buyers argues that claim 51 is obvious in light of the combination of the '624 patent and the '825 patent. Claim 51 adds the limitation of a support stand for supporting the A-frame in a generally horizontal position, and in the unmounted state, for selectively adjusting the vertical position of the assembly. The language of the limitation in claim 51 tracks that in the '700 patent's claim 9. (*Compare* '700 patent, 14:9-14, *with* '700 patent, 19:41-20:4.) In his expert report, Buyers' expert admits in analyzing claim 9 that the '825 patent "discloses a jack that is adjustable to raise and lower a snowplow frame." (Garris Decl. (dkt. #124) ¶ 88.) But as above, neither patent discloses the requisite support frame and the '624 patent actually teaches away from it. Also as above, Buyers offers nothing more than the unexplained combination of the two patents to prove obviousness. Accordingly, the court will again deny Buyers' motion on obviousness and grant Douglas's.

ORDER

IT IS ORDERED that:

- 1) Plaintiff Douglas Dynamics, LLC's motion for summary judgment of no invalidity (dkt. #120) is GRANTED;
- 2) Defendant Buyers Products Co.'s motion for summary judgment of invalidity (dkt. #166) is DENIED;
- 3) Plaintiff's motion for summary judgment of infringement (dkt. #158) is GRANTED; and

- 4) Defendant's motion for summary judgment of non-infringement (dkt. #170) is DENIED.

Entered this 13th day of March, 2014.

BY THE COURT:

/s/

WILLIAM M. CONLEY
District Judge